

Amendments to the Claims:

1-3. (Cancelled)

4. (New) A sensor for use with automatic doors, said sensor comprising:

a plurality of sensor sets, each of said sensor sets comprising a transmission means for transmitting light and a receiving means for receiving light located to oppose each other across an object detection area so that said sensor is operable to determine the presence or absence of an object within the object detection area depending on whether light emitted from each transmission means is received by an opposing receiving means;

data acquisition means for acquiring light acceptance data sent from a first receiving means and light acceptance data sent from a second receiving means; and

data exchange means for exchanging the light acceptance data from said first receiving means with the light acceptance data from said second receiving means, such that said data acquisition means is operable to acquire predetermined light acceptance data based on light emitted from one of said transmission means and that is received by an opposing receiving means,

wherein said data exchange means is operable to exchange light acceptance data when said data acquisition means fails to acquire the predetermined light acceptance data, provided that one of said transmission means emits light in the absence of an object within the object detection area.

5. (New) A sensor for automatic doors according to claim 4,

wherein said transmission means are operable, one by one, to emit light,

wherein said data exchange means is further operable to exchange light acceptance data sent from a receiving means that receives the greatest amount of light with light acceptance data sent from a receiving means located to oppose a transmission means that emits light, and

wherein said data exchange means is still further operable to exchange light acceptance data when said data acquisition means fails to acquire the predetermined light acceptance data, provided that one of said transmission means emits light in the absence of an object within the object detection area.

6. (New) A sensor for automatic doors according to claim 4, wherein said transmission means are operable to transmit light beams.

7. (New) A sensor for automatic doors according to claim 4, wherein said plurality of sensor sets comprises only two sensor sets.

8. (New) A sensor for automatic doors according to claim 4, wherein said data acquisition means is operable to acquire light acceptance data from each of said receiving means.

9. (New) A sensor for use with automatic doors, said sensor comprising:
a plurality of sensor sets, each of said sensor sets comprising a transmitter operable to transmit light and a receiver operable to receive light located to oppose each other across an object detection area so that said sensor is operable to determine the presence or absence of an object within the object detection area depending on whether light emitted from a transmitter is received by an opposing receiver;

data acquisition means for acquiring light acceptance data sent from a first receiver and light acceptance data sent from a second receiver; and

data exchanger operable to exchange the light acceptance data from said first receiver with the light acceptance data from said second receiver, such that said data acquisition means is operable to acquire predetermined light acceptance data based on light emitted from one of said transmitters and that is received by an opposing receiver,

wherein said data exchanger is operable to exchange light acceptance data when said data acquisition means fails to acquire the predetermined light acceptance data, provided that one of said transmitters emits light in the absence of an object within the object detection area.

10. (New) A sensor for automatic doors according to claim 9,
wherein said transmitters are further operable, one by one, to emit light,

wherein said data exchanger is further operable to exchange light acceptance data sent from a receiver that receives the greatest amount of light, with light acceptance data sent from a receiver located to oppose a transmitter that emits light, and

wherein said data exchanger is operable to exchange the light acceptance data when said data acquisition means fails to acquire the predetermined light acceptance data, provided that one of said transmitters emits light in the absence of an object within the object detection area.

11. (New) A sensor for use with automatic doors according to claim 9, wherein each of said transmitters is operable to transmit a light beam.

12. (New) A sensor for automatic doors according to claim 9, wherein said plurality of sensor sets comprises only two sensor sets.

13. (New) A sensor for automatic doors according to claim 9, wherein said data acquisition means is operable to acquire light acceptance data from each of said receivers.